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The American CINEMATOGRAPHER

June 1933

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Next Month

• We will publish the second in the series of articles by Hartley Harrison on Filters, Their Use and Effect. Mr. Harrison is well grounded in Filters having been in the manufacture of them for many years.

• EMERY HUSE will launch the first of a series of articles on the practical side of the laboratory as a sequel to his articles which were recently completed on Densitometry.

• TWO STORIES relating the technical experiences of two members of the American Society of Cinematographers telling how they met the unusual in a practical way.

• RIDDLE ME THIS will give the opinion of some of the leading Cinematographers of the Camera's relation to the present vogue of musicals.

• PHOTOGRAPHY of the month. An unbiased view of the efforts of the Cinematographer to register on the screen the moods and psychology of the recent releases.

• Late developments in the industry will also be reported and other news of technical interest to the entire industry.

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PERSONAL MOVIE CAMERAS AND PROJECTORS

We might title this "Painting with Filters." Both pictures are of the same plane. It was necessary according to the script to make the plane appear as a black German bomber. Elmer Dyer, A.S.C., in co-operation with the Filter Department of Eastman succeeded in turning the orange yellow wings black with a combination of filters without materially affecting the surroundings.

Special Effect Use Of Filters

by

Hartley Harrison

IT IS really a misnomer to place any certain type of filters under one class and call them effect filters because, strictly speaking, any filter may be or may not be an effect filter, depending upon the condition under which it is used and the subject that is being photographed.

Any filter that is chosen in an attempt to create a special effect is chosen with the idea in mind of creating an out of balance condition on the negative and to present a different pictorial condition, of the particular scenes or subjects that are being photographed, from the one that is actually seen visually, and of course, this difference ranges from the greatest extremes, such as some of the trick shots of completely eliminating certain portions of the scenes, to such slight differences that they are sometimes hard to discern.

If our premise is correct in the use of a particular filter under certain conditions gives a special effect, the subject and conditions playing a major part, then it should be more logical to say that the filter was used to create a special effect or a special effect use, rather than a special effect filter. As a certain effect with a particular filter can only be duplicated by duplicating the conditions under which the filter was used.

Keeping the thought in mind of a special effect use of a filter, there should be less confusion in the selection of the filter for a special effect providing the fundamental functions of color filters are always applied to the particular conditions and although it may seem elementary to some I believe it is fitting to review the fundamental functions of color filters relative to photographic conditions.

In reviewing the fundamental functions of color filters we will cover only the practical applications of filters as the photographer uses them, and not incorporate any of the great mass of theories which apply primarily to laboratory tests and laboratory experiments.

There are two kinds of transparent color filters, selective and non-selective. The non-selective filters are the so-called neutral densities. They transmit all of the colors and in effect only diminish all of the light, regardless of the color, in proportion to their density. The selective color filters are divided into three divisions.

(a) A transparent color filter allows substantially all

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RIDDLE ME THIS

The Riddle: What is your opinion of the value of natural-color cinematography?

DARRYL FRANCIS ZANUCK, Producer with United Artists

"I believe that color photography is a distinct enhancement to any picture, provided the colors are natural and true, and not harmful to the eyes. Our recent productions 'Doctor X' and 'Mystery of the Wax Museum,' made in Technicolor, were greatly enhanced by expert natural-color cinematography."

FRED W. JACKMAN, A.S.C., Director of Scientific Research and Special-effects supervisor, Warner Bros.-First National Studios.

"In my experience, working with natural-color processes—particularly Technicolor—has proved no different from working with ordinary black-and-white cinematography. Every type of special-effects work (with the natural exception of complementary-color transparency processes) is equally satisfactory in Technicolor. In the color productions we have recently made, we employed miniatures, glass shots, optical printing and projected backgrounds exactly as we would in normal monochrome productions, and with perfect freedom and success. Natural-color cinematography does not impose any restrictions upon the special-process department, and can give excellent results."

AL GILKS, A.S.C., Cinematographer, formerly with Technicolor.

"Having used both Technicolor and Multicolor as well as black-and-white for many years, I am enthusiastic about the possibilities of color-cinematography on productions suited to color. When serving as Chief Cinematographer for the recent Vanderbilt Oceanographic Expedition, I used both Multicolor and black-and-white. I was governed in my work solely by the nature of the scene: there were some scenes to which color would add little, if anything; for these I naturally chose the less expensive monochromatic photography. Other scenes, however, literally demanded color; and I photographed them in Multicolor with truly beautiful results. It is the same in regular production: some types of picture will literally demand color, while others will offer little opportunity for any but fine black-and-white photography. Such films as 'Congress Dances,' 'The Sign of the Cross,' and the like would be greatly enhanced by good natural-color cinematography. On the other hand, color could add nothing to a film like 'Scarface,' 'Dr. Jekyll and Mr. Hyde,' or 'Arrowsmith,' in which the relatively cold qualities of fine black-and-white photography are of real value."

HENRY SHARP, A.S.C., Cinematographer of 'The Black Pirate,' etc.

"Natural-color cinematography can be a tremendous aid to a picture, but it demands special care not alone in the photographing, but in the art-direction, set-dressing and costuming. When we made Doug Fairbanks' 'The Black Pirate' we spent many weeks in making tests, first of the Technicolor process itself, and then of sets, players and costumes before we were anywhere near ready to start on actual production. Once production was started, too, we were given time and all the facilities necessary to make every shot perfect. Naturally, this is not the case in most instances today. The men who make color productions today are to be congratulated on the excellent results they turn out under the restrictions of modern necessities; I am sure they could do far better with more time for testing, coordination with the art department, and for making every shot perfect during actual production. I know that I would enjoy making 'The Black Pirate' over again with the modern, perfected Technicolor—provided we could work as painstakingly as we did when we actually made the picture. But I would hate to try to get perfect results in color under today's system of small budgets, curtailed preparation, and abbreviated schedules."

RAY RENNAHAN, Cinematographer of 'Dr. X,' 'Wax Museum,' 'The Runaround,' etc.

"At present, we have very little basis for comparing natural-color productions with black-and-white, for most of the color productions of recent years have been regarded as 'specials.' However, from my own recent experience in photographing several all-color productions, made in Technicolor, I can say that color need not necessarily mean any added time or expense (other than the natural difference in cost between black-and-white and any color process). It will, however, mean harder work for three units of the troupe, the camera-crew, the electricians, and the grips. For color, we must use larger lighting units, and more of them, the color-cameras are larger, and require bigger, heavier blimps, and a majority of our lightings must necessarily be effect-lightings. All of this means harder work; but with an efficient staff, this need not take any more time than making effect-lightings for black-and-white. And it will certainly give superior results in the form of more effective, more beautiful photography.

"As I have said, the majority of all-color productions have been 'specials,' and have accordingly been given longer schedules and more generous budgets than the average program release. I do not believe, however, that they have been treated as 'specials' because they were to be made in color, but that, on the contrary, they were made in color because they were 'specials.' After all, monochrome 'special' productions recently made—such as 'King Kong,' and the like—have enjoyed far longer schedules than those of any recent color-film.

"The few times when color has been used for program attractions, we have been able to work on the same schedules, budgets, etc., as though we were making the same picture in black-and-white. For instance, in R-K-O's recent release, 'The Runaround' (originally called 'Waiting at the Church'), we worked under exactly the same conditions which would have applied if we had been making the picture in black-and-white: some large sets, some small sets, and some exterior locations. We finished the picture three days under the original black-and-white schedule, and within the budget. That, I think, answers the question perfectly: color may involve more work for the cinematographers, electricians and grips, but if they are efficient, color need add nothing to the schedule—and the results,

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L. Guy Wilky, after his razor strap became mildewed

You Must Keep Emulsions Dry In Tropics

says

L. Guy Wilky, A.S.C.

THAT humid clinging clammy moisture down in Ceylon seems to seep right into your mind. Everything sweats down there in Ceylon. Really sweats not perspire. Water comes out in too great doses to call it perspiration. It runs steadily, constantly seeming to press you in clings to your camera to everything you touch.

And it creeps into everything right into your camera into every piece of equipment unless you have it sealed.

I had been in the tropics before this expedition. I knew what to expect, but still when you leave a condition for a certain time it loses some of its vividness . . . it doesn't seem quite so bad as when you are really experiencing it.

(Editor's Note: L. Guy Wilky has just returned from a motion picture expedition into the jungles of Ceylon. Here he gives you the technical difficulties he encountered in that climate.)

I knew I had to take plenty of oil with me. Oil to keep the machinery going, oil to put on a protecting film on all metal, so as to keep out that deadly moisture that seems to start eating the minute it touches any metal surface . creating rust . . creating trouble. I would oil the camera, inside and out, not less than twice a week. Things would mildew over night. This moisture growth would be on our leather cases by morning—on our clothes if we didn't keep them dry. Razor strops would rot . so I grew a beard. At least it was one thing less to oil.

Gelatine filters crumbled away. I lost all that I had. They were useless after a few days down there in that clinging moisture where sweat seems to attack everything.

Moisture is the great enemy of the cinematographer, not only in what it will do to the equipment, but what it will do to the film emulsion itself. We kept it hermetically sealed until we wanted to use it. Then we would take out only enough for a load. We had taken a supply of film in 400 foot cans. These we taped and sealed with paraffine, then we placed them in larger tins containing felt, the felt to act as padding and possibly gather a bit of moisture. These cans we then soldered as a further protection against moisture.

But our trouble wasn't over with that protection. After we had exposed the film we placed it in a humidor containing Calcium Chloride. We used this to attract all of the moisture from the film before sealing it up again for shipment back to the United States for development.

The experience I had with the film I took with me for the Leica camera is an indication of what will happen to emulsion down there when that penetrating moisture attacks it. I was a bit more careless with this film than with the stock we brought along for production purposes. I had it in one big roll. I'd never do that again. I'd break it up in small rolls in small cans, each sufficient for one load. Everytime I opened that big can and broke into that big roll I permitted moisture to creep in. I knew it. I say I was a bit careless with that film. Once I left it in the camera too long. When I took it out the emulsion had started to stick to the polished side of the film. Small particles separated from its base. My shots were spoiled.

Some of our film we developed right there in the jungle. We would take the water from wells and filter it through cheese cloth. We would wrap the wooden tanks containing the developing mixtures in burlap and keep them saturated with water to create refrigeration by evaporation, but the lowest temperature we could get in this way was 70 degrees. This meant we had to mix our solution to fit the temperature so that it would not act too rapidly. It also meant we had a difficult time in getting that moisture out of the emulsion again. We took it out of the rinsing water just as soon as good developing practice would permit and then placed it on the drums we had made right there in Ceylon. These drums were turned by natives to create the air circulation we needed. However, after these negatives came back here to the states, to the laboratory, they were washed again. This time thoroughly, carefully. There was no danger back here of not being able to get them dry before they were ruined with dirt, or the action of some native.

All our production stills were made with the Leica camera. It meant carrying less equipment. All of one kind of film and more pictures at less expense.

We had two cameras as regular equipment, one for black and white and one for color. As a spare we had a

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Showing the sound equipment as it was mounted on sledges for production

We Wore Silk Gloves In Alaska

by

C. S. Pratt,
Sound Engineer MGM

WE WERE assigned to Alaska to make a picture. This was about a year ago We were up there in that sub-zero climate for ten months We learned a great deal in spite of the fact that we felt we had covered every contingency before we left

For many weeks before we started we created weather in a refrigerator with dry ice to a temperature of 100 degrees below zero We operated all of our equipment under these conditions But, one thing we overlooked that proved vital When we landed up there in that snow covered country we experienced a rise in temperature over night from 40 degrees below zero to 25 degrees above. That was the one thing that gave us trouble—change in temperature

We had prepared for the cold We had insulated the batteries before we left with several layers of insulator Shipped these batteries in their insulator only to find that we should not have placed the acid in them before shipping It had seeped out and eaten all of our insulation

We reloaded these batteries with acid after we arrived, made a covering for them of pine, placed chemical heat in the box and covered the box with elk skin Under extreme cold the batteries get sluggish they lose their vitality We had to be careful of this as it was misery for a company of players and technicians to stand around on the ice in weather of 40 below waiting for us to fix the mechanical things This happened to us only once We quickly discovered we could hook up to the generator furnishing the juice for the booster lights. But from then on we watched our batteries. They not only became sluggish, but when the equipment they had to turn over became extremely cold they also provided a bigger load for the batteries to turn over. Everything becomes sluggish in that severe cold

When the thermometer made sudden and rapid drops we prayed for heat It meant the oil in the machines would thicken they would slow down We wondered whether they would stop When this happened we would have to clean the machinery from all lubrication, let it run dry. And we never knew when these sudden drops were going to hit us

We had no trouble with the microphone However we did discover it was necessary to keep the current flowing for several minutes before operating This taught us to keep that current on all day so that when they were ready for action we did not have to heat the mike Seemingly the electricity running through the element furnished enough heat to keep it in good workable condition

Snow Fine pulverized grains of snow was our next nemesis I have seen a bucketful seep through a small nail hole This meant we had to house our equipment in some way and at the same time make it mobile We finally located it on a sledge, and over it we made a covering that did not look unlike the old covered wagon That was our sound bungalow up there in the ice crusted land

The sudden change of temperature was our greatest worry Taking equipment indoors was a ticklish job Moisture would congeal immediately We had taken some Calcium Chloride with us We placed quantities of this in the small cans in which the Kodak tape comes These cans we placed inside the equipment before taking it indoors so that any moisture that might be contained in the equipment would be attracted to the Chloride as the temperature rose Lenses we never took indoors We left them out day and night

Silk gloves thin silk gloves we found one of our handiest possessions . . . not to keep the cold away, but to use in handling equipment In that sub-zero temperature your fingers stick to a piece of metal as though they were glued Skin comes off your fingers when you try to pull them away The thin silk gloves worn inside your fur-lined mits are mighty fine for quick action Many pairs of them are needed. They do not last long, but they are very essential

We took along a great deal of extra equipment . many spare parts, but the only replacement required in the entire ten months was one tube In some instances we took as high as a 300% increase in parts and as low as 100% We packed these spare parts of any particular article in three separate boxes Let's say tubes Instead of placing all of the tubes in one box we divided them into three boxes This was so that if a box should become broken in transit or in handling and the goods damaged all of the one kind of spare parts would not have been lost When the water was open we used liters for transportation and

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WHAT 1933 DEMANDS

» » » NOT simply quality, but FIRST quality, is the watchword today. The pictures that "go over big" are being made under conditions and with materials that promise nothing but outstanding excellence... So look to your film! Use Eastman Sound Recording Film, and you can be sure that the sound you work so hard to perfect will come out unimpaired through the silvered screens of a critical movie world. *This film gives what 1933 demands!* Eastman Kodak Company, Rochester, New York. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN

SOUND RECORDING FILM

WHEELS OF INDUSTRY

Filmo All-Purpose Camera

● An all-purpose 16 mm camera has just been announced by Bell & Howell This camera, the Filmo 70-5 has four indicated film speeds and is equipped with a Cooke one-inch F 1 5 lens and a 216 degree shutter, giving it six and one-half times the speed of ordinary F 3 5 cameras The F 1 5 lens is fine for Kodacolor, also, which means color pictures without additional lens expense

The four indicated film speeds are half (8), normal (16), sound (24), and super (64) speed

Victor 16 MM Sound-On-Film

● Victor Animatograph Corp n, Davenport, Ia, announces that actual production of the new Sound-on-Film Animatophone is well under way and that first deliveries will be made about June 1st

The Sound head, comprised of exciter lamp, lens, sound gate, photo-electric cell and threading rolls, is side-mounted on the support base of the projector and occupies a space of only 2½"x4¼"x6" The highly developed amplifier (5 tube) is mounted at the rear of the projector and occupies a space of only 6"x7"x8" Auditorium speaker and 50 foot cord are housed in a removable side of the projector carrying case The entire equipment in carrying case weighs only fifty pounds

It is claimed by Victor that several optical, mechanical and phonetic features have been developed which have made possible a quality of reproduction that was unhoped for in the beginning The high frequency range which has been attained appears to be a particular source of pride to the makers

Sound volume and picture illumination are sufficient for comparatively large school and church auditoriums

It is understood that this initial model of the S-O-F Animatophone may be followed with a "Blimp" model and possibly a combination model which will include the sound-on-disc equipment of the original Sound-On-Disc Animatophone

The Animatophone will run SILENT as well as Sound film.

Roll Film Dryer

● Burleigh Brooks announces a new roll film dryer which consists of two rubber rollers worked by a thumb arrangement between which the film is placed and merely pulled through

A new Miniature Tank is also announced by Brooks These are made of rust-proof metal, chromium plated requiring a small quantity of solution

Included in his announcement is also a new enlarger paper holder. This contains a set of six masks which give enlargements with white border from approximately 3½x4" to 8x10" They are made to hinge on each other and because of their weight are said to hold the paper flat.

Kodak Dark Room Paint

● A paint produced especially for photographic dark-room and laboratory purposes has been announced by the Eastman Kodak Company, identified with the name Kodacoat

It is non-inflammable, non-fogging, non-reflecting, acid- and alkali-proof and waterproof, it resists all chemical solutions, including oxidizing and reducing agents; it contains no phenolic compounds, it will stick firmly to any dry material, it doesn't become brittle or flaky, it needs no thinning, it is quick-drying, and it is odorless

With it, tanks made of wood, stone, cement, sheet iron, copper, or tin can be made waterproof and chemical-proof It

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LEICA Camera

May 19th, 1933
Report of A. S. C. Testing Committee concerning E. Leitz, Inc., Leica Camera.

WHEREAS E Leitz, Inc, has submitted to the American Society of Cinematographers its Leica Camera duly accompanied by the aforesaid manufacturer's claims and specifications for that article, and

WHEREAS the Testing Committee of the American Society of Cinematographers has duly tested the said product in accordance with these specifications and with practical tests, and

WHEREAS the said Testing Committee has found the said "Leica Camera" to be satisfactory according to the aforementioned claims and to have satisfactorily undergone the Committee's practical tests

THEREFORE does the Testing Committee of the American Society of Cinematographers certify that the said Leica Camera is worthy of the approval of the American Society of Cinematographers and does authorize the Secretary of the said Society to bestow upon the said Leica Camera the mark of the Society's approval, which Stamp of Approval does authorize the said E Leitz, Inc to imprint upon its product, the said "Leica Camera", and to use in its advertising of that product so long as the design and manufacture of that product do remain unchanged.

AMATEUR SECTION

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by Clark Gable

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by George W Hesse

WHY Many Enlargements are Disappointing
by Burleigh Brooks

HERE S How
by Members of A S C

NEWS of the Cine Field

Next Month . . .

- WHEN AND HOW TO USE SPECIAL EFFECTS by Dewey Wrigley, A S C With the advent of the new cameras giving the Cinephotographer the necessary attachments to crank in reverse this will prove a timely article
- SOMETHING ABOUT LENSES, STOPS, ETC by an expert Explaining in detail what the various designations on the lenses mean, their purpose and how to use them.
- WHAT I LEARNED FROM A PROFESSIONAL An amateur corners a professional and gets the proverbial "ear-full"
- INTENSIFYING YOUR 16 MM PICTURES William Stull A S C, will tell you how to intensify a weak reversible print a picture that has been underexposed so as to bring out all of its values
- MAKING TESTS WITH AN 8 MM CAMERA A bit of economy combined with a pleasure that seeps through the entire family The 8 mm comes into its own in the hands of a Cinephotographer
- HOW TO SHOOT THE AIR RACES He planned it first then shot it afterwards Anyway, we will let this air enthusiast tell you of the thrill of shooting the gasoline birds at play

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This illustration needs no caption. Clark Gable is not only a star of the professional field, but is fast becoming an efficient cinephotographer.

I Like To Hunt— With a Camera

by
Clark Gable,
Cinephotographer

I LIKE to hunt Most men do, whether they're bank presidents, farmers, or cowpunchers There's something about getting out in the open, forgetting for the moment all of the artificialities of what we call civilization, and living more nearly as nature intended us to live, that fills an important need in a man's life At any rate, I get a big kick out of living out doors with a bunch of good fellows who don't give a hang who you are, as long as you're "regular," and can carry your end of the load, whether it is hitting a hard trail on horseback, scrambling up a mountain, or scrambling a bunch of eggs for a camp breakfast On the other hand, I'm not so strong on killing things Most of our wild animals are so appealingly, vibrantly alive, and seem to get so much enjoyment out of being alive, that I feel rather guilty at being responsible for putting an end to their enjoyment I suppose this feeling is common to most men who have had tough spots in their own lives, when everything seemed to break wrong, and the next meal (like the animal's) was highly problematical I've met a lot of other fellows who feel the same way about it, too Anyhow, that's the way I feel— I get a huge thrill out of being out in the open, and hunting things down—but I'm not so fond of killing them once I've found them, the philosophers say that in hunting as in most everything else, it is the pursuit that we enjoy rather than the capture—anticipation rather than realization Well, I'm not much of a philosopher but I've learned how to get the fullest and most lasting enjoyment out of my hunting-trips

How?

With a 16 mm camera

After being privileged to serve as one of the judges in the AMERICAN CINEMATOGRAPHER'S amateur movie contest last fall, I began to get an idea that 16 mm and hunting ought to go well together So I went into a huddle with Johnny Arnold—and emerged the proud (and rather nervous) possessor of a very complete 16 mm outfit Up to that time, I don't suppose I'd ever even made a snapshot with a "Brownie"—or if I had, they were the sort I wanted to forget At any rate, I didn't know the first thing about taking pictures of any kind, but John showed me how my outfit worked, told me what to do and what not to do—and the results surprised me Between the camera I chose, and John's capable instructions, something happened that covered up my inexperience completely

Of course I made mistakes—who doesn't?—and I'm still making plenty of them, but on the other hand I've gotten more enjoyment out of making my own movies than I'd have imagined anyone could Luckily, Bill Daniels was the cinematographer in charge of the first picture I made after getting my outfit—and he and Johnnie Arnold took me in hand and put my movie-making years ahead of where it would have been otherwise.

While I was working on that picture, I started a sort of a film-diary of my work at the studio, my friends, co-workers, and so on, that will be a mighty valuable thing to me in years to come After all, none of us can expect to be active in the picture business forever, I, for one, expect to retire some day, and settle down to grow old quietly Then, these reels I'm building up of my work and friends of today will be a wonderful thing—a living, moving record of my memories

But all of that is secondary to the real reason I got my camera—to take the place of a rifle when I go hunting If you "get" a cougar, a deer or a grizzly with lead, that's the end of it, but if you "get" him on the film, you've got him forever, with all of the vibrant movement and activity of life. And you get an even bigger thrill out of trailing him with a camera than out of killing him with a gun At least, I do

Soon after I finished "The White Sister," I had my first opportunity to take my 16 mm outfit a-hunting A bunch of us went out into the wilder parts of Arizona after cougars, and my filmo went with us By that time—thanks to John Arnold and Bill Daniels—I'd learned enough about photography so that I wasn't making too many mistakes, so I brought back some pretty good pictures I learned a lot, too, about hunting with a movie-camera, some of it might be useful to other amateurs who are as keen about hunting and movie-making as I am

Continued on Page 70

Shooting an Indian Sun Dance

by

Ralph Newcomb,
Cinephotographer

IT was the annual sun-dance celebration held by the Bannock Indians at the Fort Hall reservation near Pocatello Idaho I had driven some two hundred and fifty miles to catch that festive Indian atmosphere in motion pictures The matter of continuity for the picture had been planned beforehand and everything was going along nicely for me

The continuity as planned called for an opening shot upon the buildings at the Indian Agency with a painted sign giving the name of the agency, in the immediate foreground Then some scenes of activity at the agency—store, post office, etc Then out toward the festivities About midway, the car was parked alongside the road and scenes shot through the open window to catch the variety of traffic going to the celebration Indians in cars—mostly open models, Indians in rattletraps, Indians in buckboards and Indians on horse back A variety of angles were used to show the sardine-like passenger load carried by these various vehicles—the dust, the jolts, and that continuous line trailing through the sage brush towards a distant clump of willow brush and white tents

Then some shots of the big crowd itself Human interest shots of the silent squaws, the talkative old men of young girls dressed in gay modern styles and of young girls draped in blankets—the new and the old

The attendent camp gound dotted with canvas tents of variety in shape and size, each surrounded with a high hedge of willow brush, offered some very interesting bits of action Indian children are unruly and papa has to spank, just like white men In fact, some rare movie gems of Indian home life can here be secured if the cameraman will develop enough patience All of these scenes above mentioned must be taken through your car window and a three-inch lens can be used to advantage, the point being that you must take your pictures unobserved To show the importance of obscurity I will continue my experience in the attempt to photograph the oance itself

Leaving the camera locked safely in the car, I was now scouting around looking for angles best lighting, and that precious obscurity The region of the stoic squaws looked the least forbidding Perhaps I could shoot thirty or forty feet and get away before the camera attracted too much attention

Returning to the car I took the camera out of the case, hid it under my jacket and walked cautiously to a point outside the brush enclosure and a little apart from the squaws and children

The light was perfect and a good rift found among the leaves and branches through which I could train the camera upon both the dancers and the musicians I stood for a moment—no one was paying any attention to me—Now!

I set the lens at the proper stop and focus, wound the spring tight, put the viewfinder to my eye, trained it upon a dancer just advancing, pressed the release—a slight buzz of machinery—then, WHAM! The viewfinder peeled a little skin off my eye in its sudden forced descent I still hung on to the camera although some strenuous force was trying to wrest it from me

What happened?—Well, just plenty One of those impassive unseeing elderly squaws had come up from behind and had struck down upon the camera with all her strength —and she did not stop at that She was for tearing it up

That did start a lot of jibbering encouragement from the rest of the female group I jerked the camera away without making any more fuss than possible and hurried back to the car I was followed by one short round fellow wearing a black shirt, with a black silk handkerchief tied around his neck, and with two long braids of hair dropping down from beneath a wide, black and well beaded hat

'What you got?" he asked, pointing toward the camera

"Pictures," I answered

"No! No!" He shook his head 'Head man no let pictures," then added, "For much money, head man let pictures"

'How much?' I asked

"Me see head man Cost much money,' was his reply

I shook my head and put the camera back into the case hoping that such action might at least take off his accent on the word, 'much" He did not seem the least concerned

One of the men from the Indian agency then came over to see what the excitement was all about When I told him of my trouble he merely laughed and said that the Indians were becoming money smart A few years ago a news reel cameraman came to one of their dances and

Continued on Page 71

Studying the Professional

by **Karl Hale**

THERE is no finer series of pictures for the amateur to study than the Fox Movietone Magic Carpets. Look them over and you'll realize that everyone of them are silent pictures. The sound that has been dubbed in is mostly descriptive or merely musical background.

Study them carefully and you'll secure a mighty valuable education in cutting, in continuity, and in what to shoot when you are visiting foreign cities, strange lands and other points in your travels.

Several pictures put out under that banner have been of cities. One was of Manhattan, the other of Berlin. These two pictures do not go in for monuments, big buildings, bridges and other things of that nature. They go after the soul and spirit of the city. They show the teeming life, the cosmopolitan atmosphere of those towns. People are shown, types, right in action. These cameramen employed long distance lenses and got pictures of people who did not know their picture was being taken. They showed them at work on the sidewalks, at meals, and cut into all of this was the nature of the life in that section: the whizzing cars, the rumbling trucks, taxis, elevated roads, push carts. The thing was human, interesting, some thing that everyone will enjoy.

A record like that of a city will live forever. Shots of prominent buildings, prominent people, seem so useless. You can clip them out of newspapers, buy them on post cards. It's the unusual that's valuable . . . that's interesting.

Those of you who might be visiting the Century of Progress this year in Chicago, could very well keep those Magic Carpets in mind. Pass up the scenes that you can get on postcards. Get the spirit of the Exposition. People from all lands and all climes. Here's where a long distance lens is going to prove mighty valuable to the Cinephotographer. You'll have to get some pictures when they do not know you are taking them. It will be more interesting to show someone tying a shoe lace in that whirlpool of traffic than it would be to show the contour of the most beautiful building. Show them eating their lunch on the benches. Switch to the beautiful restaurants for contrast. Show the poor and show the haughty, flashes, interesting angles, flashes of the police directing traffic, giving information to the confused, taking care of the lost children. There is one of the grandest pictures you ever shot in that exposition, if you'll keep your nose for news to the ground and your picture eye peeled.

Not only that fair, but any place you might visit. An individual tree picked out from a forest of trees is more interesting. If you could lap dissolve from the waves of lake Michigan, on the shores of which this Exposition is going to be held, into some fountain or some other scene that might suggest itself as you travel about, you would secure some mighty fine effects.

Get the spirit of that exposition. It will be a joy to you forever. And when you are roaming about with your camera, keep the professional in mind, especially those scenes of travel you have admired, those scenes of cities and people which they have put on the screen for your entertainment. Don't just shoot because something looks spectacular, perhaps it is the color in the scene that intrigues you. Remember you can't get that color on the film. It is black and white. There is more interesting color in humans, in their actions, snapped quickly, intimately, that will give you a picture you will be proud of the rest of your life.

What if you don't know the people you are shooting. They are representative of a cross section of the Fair. They are the spirit of the thing. When you photograph the spirit of anything, you get one of the finest pictures you can secure. Maybe it's a certain angle that will bring it out better than anything else. Try it out. Don't shoot your scenes too long. Make them short, make them snappy . . . kaleidoscopic. You will find your picture will grip the attention of everyone who sees it. It will be a picture you'll never tire of.

This same principle of picture making holds good in the small town. It has a spirit. It has something that separates and identifies it from other towns. If it is the center of a farming community, you can show the effect of the agriculturist on that city. You switch from a farm scene to the town combining and interlacing the two showing that they are really one.

While we stressed the Movietone Magic Carpet, still there are other productions. You will usually find them among the "shorts" on the theatre program. The un-

Continued on Page 71

Dan Clark, A.S.C., noted for his outdoor photography, in a typical setting

Light Control . . . Inside and Out

by
George W. Hesse
Cinephotographer

PHOTOGRAPHY is essentially the manipulation of light In still work we have an enormous amount of control over the negative, we can retouch or etch it as we see fit In printing or enlarging we are enabled to dodge or shade it to produce a better rendering of our subject than originally contained in the negative All such methods are barred the cine enthusiast He must exercise his control by means of the light with which he is photographing the scene

Thus in order to manipulate the light to suit our requirements we must have absolute control over it In interior work this is relatively easy as we can control the light at its source and we are absolute master over the intensity, direction and quality of light In outdoor work it is a bit more difficult. We have the sun and reflected light, or on cloudy days, we have an even, diffused light

If the angle of light, softness or harshness displeases us we can't very well order the sun to do as we wish While we cannot master the light and we must take it as it is given to us, all is not lost for we can control it and bend it to our bidding All other factors being equal, camera work, acting, direction and story, it is the proper control of light which makes the difference between a mediocre picture and one which gains the whole-hearted enthusiasm of the audience

Interiors are perhaps the simplest and easiest lighting effects to arrange . . for we have a supreme and positive control over our illumination We can place our light sources where and how we want them Shading and modeling are greatly simplified as compared to exterior work

Today with super-sensitive emulsions and the handy photo-flood lamps, our interior scenes are bounded only by our ingenuity and imagination Heretofore, with the relatively expensive, high-powered units necessary for interior photography, we had an acceptable excuse for confining our interiors to close-ups and semi close-ups

Our first problem in interior lighting is to lay the basic light (an overall diffused lighting determining the luminosity of the shadows) from which we build up our half tones and highlights Arranging the basic light is quite a simple matter, four or five photoflood lamps screwed into the ceiling and wall brackets and we have all the illumination we desire Of course, because of their relatively short life, we do not turn them on until we are ready to film

We can improve the efficiency of this method of lighting and further concentrate it on the area which we wish to photograph by placing small shield-like reflectors in back of the bulbs and facing toward our set This is really a necessary precaution as in this way we keep stray light from falling on our lens Small pieces of heavy cardboard secured to the bulb with a bit of cord or wire will serve admirably.

With the basic lighting arranged we can proceed with modeling the players and securing the desired play of light and shade across their faces For this purpose we use our ordinary lighting units, gauze diffusers, reflectors and the like If necessary we can press a bridge lamp or a reading lamp into service by equipping it with another photoflood bulb.

Outdoor scenes require other methods of light control and we must resort to the use of reflectors, gauze mattes, gauze diffusers and filters The use of reflectors are too well known to require much discussion They are used to throw back on a relatively small and local area, (such as the head in a close-up), light of a definite degree and quality, depending on the reflector used The light is thrown back for the purpose of building up the shaded portion of the face so that the range of contrast between the highlight and the shadow side will be more equable

Gauzing is resorted to to give a scene a beautiful, diffused quality unattainable in any other manner In contrasty lighting it removes the hard, sharp qualities marring the effect desired The gauze to use is black with a rather wide mesh It is used about two or three inches in front of the lens in place of a filter In fact you can slip it in the filter holder by gluing the gauze taut between two carboard rims the size of a filter It must be observed that the finer the mesh of the gauze the greater the degree of diffusion, necessitating a slightly increased exposure

Diffusers are used for a similar purpose but they differ in that their use is to locally diffuse a portion of the light falling on the scene. If in a semi-closeup the light falling

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Hara is a fine example of light control as practiced in the studio

6x6 C. M

4x4 C. M.

Why Many Enlargements Are Disappointing

by **Burleigh Brooks**

ONE of the most common sources of failure in obtaining good enlargements, especially from extremely small negatives, has been the movement of the camera

And this fault is mighty hard to recognize in the print for the average make of pictures It may impress him that his lens was out of focus, or he may even feel that the lens is not 100% true It might appear that the lens was a bit dirty or one of the many small things that might cause poor pictures when everything else seemingly is perfect

Movement is readily detected in the case of extreme motion, but in the large percentage of cases is so slight that it is not detected unless the negative is enlarged and examined through a powerful magnifying glass It then appears as merely not sharp, and the user is inclined to blame the lens, enlarger, or developing

It cannot be too strongly emphasized that it is possible to show such movement to the extent that it makes impossible good enlargements even when using a lens of a speed as high as 1/100 part of a second It is then obvious that it is very easily possible to show movement at 1/50 of a second, and extreme care must be used when operating the camera at 1/25 of a second and slower It is then better to always make, if possible, more than one picture of each subject, choosing the better one on completion.

There are many means of steadying the camera, such as by holding it against the cheek, chest, etc, holding the breath while exposing, and, of course, using a tripod The cable release is of utmost importance in making slow snapshots, as the flexible movement removes a great deal of the danger

For "Candid" photography the speeds of 1/10 and 1/5 of a second, such as are found on the Compur shutters of the Rolleiflex and Dolly, are most useful Focal plane shutters do not generally work slower than 1/20 of a second.

Lack of perfect focus is almost as troublesome as movement, and faulty definition on account of this is also often blamed on the quality of the lens and other points Two small negatives made at the same time will look to the eye equally sharp but when they are enlarged the focus of one may be found to have been off just enough to impair the results The twin lens cameras, such as the Rolleiflex, which has one lens for focusing, obviates this defect to a great extent, since with such a camera imperfect pictures are possible only by extremely careless use

When using extremely small cameras such as the half vest-pocket size Dolly, all of the above should be taken into consideration, as well as care in developing It is necessary that extreme care be used in every procedure, even to a fine grain developer, with such tiny cameras; otherwise, the results will be disappointing

The larger size Rolleiflex makes negatives two and one-half by two and one-quarter inches square, which is about three times larger than the half vest-pocket size, and such exacting care and skill as is necessary with smaller cameras is thus obviously not essential with these

The smaller the picture the more perfect your negative must be for good enlargements It is obvious that when enlarging the small negative even to 8 x 10 that there is a great increase in every detail of the picture, we might say almost an exaggeration Faults also are enlarged many times Movement by the same token we might say increases A very slight movement with a small negative is increased in the faults it produces many times greater than the same movement in an 8 x 10 negative

The great popularity of the small negative and the possibilities of enlarging them into the desired size also brings with it added responsibilities While these responsibilities are very slight, still when you do secure a perfect picture in the enlargement you can mark yourself down as a better photographer than if you had achieved seemingly the same results with a larger negative

HERE'S HOW

by A. S. C. Members

WATER FOR DEVELOPING. "I have read somewhere that the chemical contents of water has a marked effect on prints and negatives because of its action in developing. Where can I secure some published information on this?"
A. R. McD., Wilwaukee, Wis.

A very comprehensive article was published on this in the Cinematographic Annual Vol. I. This was authored by J. I. Crabtree and G. E. Matthews of the research department of the Kodak company. This lists the impurities in water, the effect of impurities on processing development. They give methods of purification of water by distillation, boiling, filtration and chemical treatment. They also describe what can be done with sea water in an extreme emergency. From the nature of your inquiry we are of the belief this article will fully answer your question.

—L. Guy Wilky, A.S.C.

KEYED PHOTOGRAPHY. "What is meant by high key, low key and medium key photography? I often see these terms mentioned in your reviews of the photography of the professional pictures."
B. G. G., Indianapolis.

These terms refer to the visual tone of the picture, high key indicating that light tones predominate, low key indicating that darker, more sombre tones predominate. Excellent examples of this are to be found in the pictorial section of the Cinematographic Annual Vol. 2, where Plate XLII ("Pictorial Study" by Ned van Buren, A.S.C.) is an excellent high-key landscape, and Plate XLIII ("Desert Study," also by Mr. van Buren) is a typical low-key landscape. Similarly, Russell Ball's portrait study of Noel Francis (Plate LI) is an excellent high-key portrait and Lawrence Grant's "Portrait Study" (Plate XXXV) is an exemplary low-key portrait.

—John F. Seitz, A.S.C.

AIRPLANE CRASHES. "Thanks for 'Stunts and Flights' in last month's 'Here's How.' Your magazine is more and more interesting all the time. Now! How about airplane crashes?"
—H. W. V., Ft. Meyers, Fla.

The majority of the airplane crashes in aerial films have been bona-fide, the stunt-man Dick Grace, referred to last month, has for a number of years made a specialty of crashing airplanes for the camera, having completed, to date, a total of about fifty crashes. He guarantees to smash an airplane exactly to order; hitting and stopping at any desired point, smashing in any way desired, and landing in any desired position (right-side-up, upside down, etc.). He has been known to place a handkerchief on the ground before a crash, promise to pick it up from the crashed plane, and smash the plane so accurately that all he had to do was reach out of the cockpit and pick up the handkerchief! He has, in doing these crashes managed to break most of his bones (including his neck!), but he is still alive and still crashing planes. In some recent films, crashes have been faked, either with miniatures or with real planes thrown into the ground with a huge catapult, but in neither case is the picture so convincing as one of Grace's bona-fide crashes. In one sequence of "Hell Divers," a plane was supposed to land on a sandy beach. This beach was made on the MGM studio lot, a runway of three parallel planks, for the wheels and tail-skid, was laid down just under the surface of the sand, which was deep elsewhere, and a Navy pilot actually set one of these fast ships down on that hidden runway! For more information on plan-crashes read Dick Grace's "Squadron of Death" and "I Am Still Alive."

—Elmer G. Dyer, A.S.C.

LARGE FINDERS FOR TELE-PHOTO WORK. "I use a Filmo 70-D camera, with 1", 2" and 4" lenses. In using the tele lenses for quick action work, I find that the small size of the finder-mattes is a great disadvantage. How can I get a bigger finder-image?"
—C.G., Beverly Hills.

The simplest thing to do is to get an extra door for your camera fitted with the finder of the older 70-A type. Then have a finder lens matched to the 2" lens, and engraved to show the field for the 4". For use with the 1" lens, you can get an auxiliary lens to slip over this, just as the auxiliary finder-lens for the 15 mm. lens fits over the regular 70-D finder. As a precaution, it might be well to have this auxiliary lens made of tinted glass, so you would not leave it on when using the 2" and 4" lenses.

—William Stull, A.S.C.

APERTURE MARKS. "Recently when I was shopping for a still camera I noticed that there were several different methods of marking the aperture. The Leica camera had such stops as 4.5 6.3, 9 etc. Others had the U.S. system such as 4 8 16. These were confusing to me. Will you explain these different markings."
—J. C. I., Denver.

There are three systems in vogue. The most common here and in England is the commonly termed British-American F numbers. The Leica uses what is known as the Continental F system.

The following table will show you the relative exposure values of each system.

Con F	B A F	U S	Relative Exposure
	4	1	1
4.5			1¼
	5.6	2	2
6.3			2½
	8	4	4
9			5
	11.3	8	8
12.5			10
	16	16	16
18			20
	22.6	32	32
25			40
	32	64	64
36			80
	45.2	128	128
50			160

—Jackson Rose, A.S.C.

CLEANING FILM. "How can I clean film which has become dirty?"

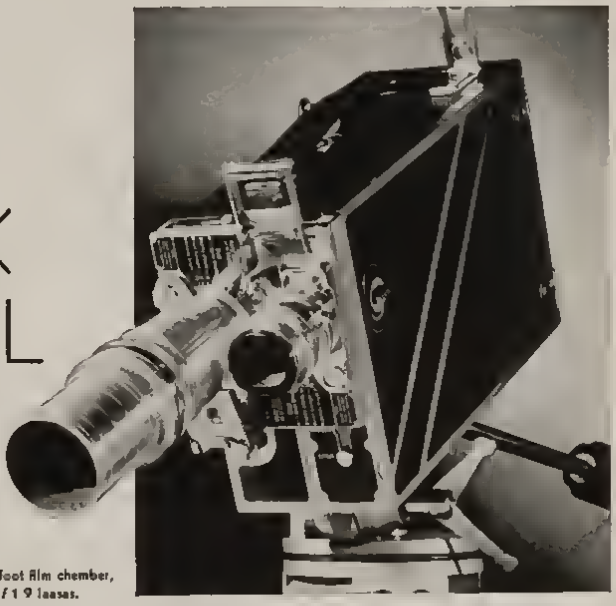
Moisten several layers of cloth with Carbon Tetrachloride (Carbona) and run your film through this. You will find it will do a very nice job of cleaning and will not injure the film.

If, however, you wish a particularly good job of cleaning done on your film I would suggest you send it to a film laboratory. These laboratories are equipped for just such a work. They will pass the film through various chemicals, polishers and buffers with the result that the film will look like new.

—Edward J. Schneider, A.S.C.

CINÉ-KODAK SPECIAL

EXCEEDS YOUR HIGHEST PICTURE MAKING AMBITIONS



Cine-Kodak Special with 100-foot film chamber, 6-inch telephoto and standard *f* 1.9 lenses.

CINÉ-KODAK SPECIAL completely frees serious picture makers from the necessary restrictions of regular 16 mm. home movie cameras. With this remarkable instrument all of the unusual effects—such as double or multiple exposures, lap dissolves and animation—are made easy and certain

PROMINENT FEATURES, MANY EXCLUSIVE

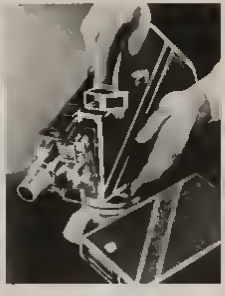
Variable speed control, interchangeable film chambers, reflex and eye-level finders, variable shutter, single-frame release, one- and eight-frame hand cranks, and a set of masks are but a few of the Special's outstanding appointments.

Ask your Ciné-Kodak dealer about the Special. A comprehensive descriptive booklet will be sent from Rochester free on request.

The Special's exclusive and easily operated variable slit shutter makes fades and lap dissolves easy and certain

The one- and eight-frame hand crank shafts have many uses—among them winding back for dissolves and double exposures

The Special's reflex finder shows the field of the taking lens on a ground glass screen — permits visual focusing with all lenses.



Interchangeable 100-foot and 200-foot film chambers enable you to switch from one film to another in a few seconds

If it isn't an Eastman, it isn't a Kodak

EASTMAN KODAK COMPANY, ROCHESTER, NEW YORK

CINEPHOTOGRAPHER *Leads . . .*

Here's How They Voted!

Out of a total of 1563 Votes received from every section of the country the name CINEPHOTOGRAPHER is leading by a large margin

CINEPHOTOGRAPHER	1116 Votes
CINEGRAPHIST	131 Votes
CINEGRAPHER	92 Votes

This represents returns up to the time of going to press. They are still coming in. You can't tell, next month may see a reversal of this listing, however it does seem very doubtful.

Here are some of the comments given in connection with this idea.

"Your action in giving the Amateur Cinematographer a more dignified name than Amateur Movie Maker is one of the finest things that has been done for us. I agree that Amateur is not fitting for many who are now pursuing this hobby."

"Long live CINEPHOTOGRAPHER. Deep down in my heart I always hated to admit that I was an amateur. The name Cinephotographer is going to make us a bit more proud of our hobby."

"I want to thank the American Society of Cinematographers for taking us under their wing through their publication THE AMERICAN CINEMATOGRAPHER. I was at the point where I didn't know where to turn for the information I needed. Your campaign to give the advanced amateur a distinctive name is a mighty progressive step. I'm for CINEPHOTOGRAPHER."

This is just a few of the typical letters we received on this suggestion to give the Advanced Amateur a name that would distinctly label him as being advanced in the hobby of Cinematography.

It's not too late to vote, use a post card if you wish. Perhaps you believe the name CINEPHOTOGRAPHER can be improved. Give us your suggestion.

I prefer the name

_____

for the user of Cine cameras

Name _____

Street _____

City _____

Wheels of Industry

Continued from Page 56

can be used for repair purposes. Tabletops can be made resistant to acid or alkali. Walls can be finished to resist all photographic solutions. Sinks can be lined.

Hypo recovery barrels or boxes can be preserved. Darkroom floors can be made chemical-proof and can be sealed. Cement floors can be water-proofed. Funnels can be made chemical-proof. Reflections can be killed. Leather, cloth, or fabrics can be made waterproof and chemical-proof.

Above the six-foot line, protection against the ravages of photographic chemicals or water is unnecessary, but a safe color is still necessary. Another new paint supplied by the Eastman Kodak Company, "Panchromatic Green," has been compounded for this purpose.

Panchromatic Green is a light green which reflects all the light possible when a darkroom is lighted with a Panchromatic Safelight or a Series 3 Safelight. If, on the other hand, the room is lighted with a yellow or a red safe-light, the reflective power of the paint is still at a maximum for such a color. When a a darkroom is painted with Panchromatic Green, the walls look light under the illumination of a Series 3 Safelight, and gray when the room is flooded with yellow light, but dark when red light is used.

16 mm Splicer and Rewind

● The Fotoshop announces a new 16 mm Splicer and geared Rewind which they claim is one of the lowest priced on the market and still has a utility that is surprising. The equipment contains the two rewinds, a splicer and clamp for the cementing of the film. It sells for less than five dollars.

New Filmo Projector

● Bell & Howell has recently brought out a new Filmo projector, the Model R, complete with such features as 500-watt illumination, automatic power rewind, reverse switch for running film backwards, clutch for still projection, manual framer, etc.

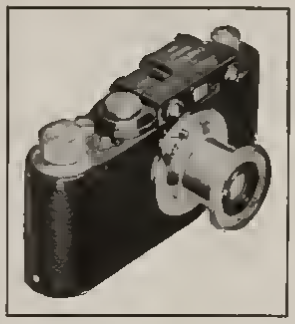
While a 500-watt 110-volt lamp with its intense illumination is standard for this new projector, 300-, 400-, and 500-watt 105- to 120-volt lamps may also be used.

A special device provides cooling for high power lamps, thus prolonging lamp life and giving maximum efficiency. It provides comfortable coolness for the projector exterior, too.

The manual framer takes care of out-of-frame prints, while properly made pictures are framed automatically.

A lateral reflector adjustment is claimed to give maximum effectiveness to the reflector.

This projector can be had without case, clutch, rewind and reverse at a reduction in basic price.



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The LEICA Camera may be equipped with a Universal View Finder, Angle View Finder or Reflecting View Finder. Over 300 Leica attachments and accessories for every photographic need.
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10% price increase on LEICA Cameras and equipment effective May 6th, due to fluctuation in exchange rates.

E. LEITZ, Inc., Dept. 307
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Microscopic Device

● The making of microscopic motion pictures has been greatly simplified by an attachment developed for use with a Bell & Howell 16 mm. motion picture camera and any ordinary microscope. The device consists of a horizontal tube mounting a split-beam prism which deflects about 90 per cent of the available photographic light in a parallel ray, into the regular standard 1" F:3.5 camera lens, which remains set at infinity. The remainder of the light passes up the microscope tube, set at 160 mm., over which fits a finder-sleeve fitted with a mask which shows the user the limits of the field being photographed by the camera. This reduced amount of light reaching the eye makes it easy to observe the object that is being photographed and to keep it in sharp focus by means of the fine adjustment of the microscope itself. The third part of the accessory set-up is an adjustable camera stand that raises and lowers the camera to the exact height made necessary by the particular job under the microscope objective.

Metropolitan Club to Film Manhattan

● As a club activity the Metropolitan Motion Picture Club is planning the filming of New York City This, according to the present plan, will not consist of the usual shots of principal buildings and statues, but will show the people of New York, at work and at play, types and characters, giving a cross section of the city in the peoples that make up that interesting city

This is a part of the news of their interesting little paper which they have given the title of "Close-Up" edited by Annette C. Decker We highly commend the editor on her fine ability to make this two page multigraphed sheet newsy and interesting, not only to the members of the club but to anyone interested in the making of 16 mm pictures

Some of the things featured by this club were "Garden Close-ups' at their January meeting This consisted of pictures made of the gardens of members 'Talk on Composition' was the special feature for the February meeting Lighting" was given the limelight in the March gathering. In April the highlight was a demonstration of Victor Animatograph products In May several of the pictures entered in the American Cinematographer 1932 contest were shown and in June they have the prize winning pictures of 1932 scheduled for the highlight of the meeting

Hoffman Works Out Dissolves

● T B Hoffman who was awarded the prize for the "Ideal Home Movie" has been doing much experimenting with his Filmo on dissolves He is employing this particularly in assembling the pictures of his youngster's successive birthdays, dissolving one event into another

In winding back for this purpose he has conceived the idea of placing a very minute particle of Kodak tape on the face of the film so that when he rewinds his finger will quickly feel this

Also he works his footage out by having someone hold a stop watch so that he can correctly time the action

Movie Star Visits With Greenbrier Club

● Jacqueline Logan, famed for her achievements in pictures, visited the Greenbrier Movie Club at their last meeting in White Sulphur Springs, W Va Miss Logan spent considerable time with the members of the club, according to Hal Morey secretary, giving some of the girls pointers on make-up

In keeping with the time the Greenbrier Club will give a Stein Party on June 16th Prosit!

Portland Meeting Features Sound On 16 mm.

● At the May meeting of the Portland Cine Club "Sound on 16 mm" was the tempting morsel that brought out not only practically a full membership, but many friends

Arrangements for this interesting meeting were made by August Benz secretary, and other officers of that club

Newcomb Making Picture For Television

● R V Newcomb who conducts the class in Cinematography at the University of South Dakota has just completed a 100 foot comedy on standard film for television purposes

Just how this is going to be used, Newcomb does not state However, it evidently is the first of its kind that has been produced exclusively for Television

Newcomb also secured some interesting pictures for the South Dakota Board of Health of the Typhoid epidemic in Chamberlain S D, where there were 300 cases of typhoid in a little town of 1500 people This picture includes interiors hospital and laboratory scenes

Little Shoots Picture At Midnight

● Taking advantage of the light provided by a battery of army search lights in the launching of a ship recently in New York Duncan MacD Little trained his camera on this leviathan of the deep and secured some mighty interesting pictures of the maiden trip of this vessel This, also, in spite of the fact that it all occurred during a very heavy down pour of rain

Rodakiewicz On Film Expedition

● Henry Rodakiewicz who submitted the beautiful "Portrait of a Young Man' in the 1932 Competition has joined a expedition that is headed for British Guiana Rodakiewicz goes as the anthropologist of the party This expedition will make a motion picture record of this expedition with Floyd Crosby who photographed a part of "Tabu" acting as the cinematographer

Chicago To View Pictures Of Boston Club

● In an interchange of pictures the Chicago Cinema Club at its next meeting will view six reels which were sent to them by the Boston Cinema Club

The Chicago Cinema Club sent a number of its pictures for a recent meeting of the Boston Club These clubs not only interchange pictures, but they interchange criticisms These criticisms spare none of the Cine producers

Summers Uses Professional Finder

● W J Summers is a bit particular about getting what he sees, or is it seeing what he gets? Anyway, he has equipped his camera with one of the Harrison Professional 16 mm finders which is built for parallax so that he can set it for the footage of the subject which he is shooting Also according to his statement he has had it equipped with masks for lenses ranging up to 4"

San Francisco Club Makes Comedy

● As the highlight of their picnic and field day held on May 21st the Cinema Club of San Francisco set down a program that tested the ability of their members

A rule was made that all who attended the picnic were obliged to perform any act which was requested of the cameraman At some subsequent meeting the club will pick by vote the picture produced with the scenes shot on this field day as a basis, although the general theme of the picture may be anything the maker desires so long as the field day shots have been worked in

Navin Will Produce Comedy For Competition

● Jack Navin who last year entered his picture "Drifting" intends to enter a comedy in this year's competition The picture has tentatively been titled "Sub-Deb" and will have in its leading roles Elizabeth Sutherland, Thayer Hutchinson Ted Newman and Edward MacKenzie, all of whom appeared in 'Drifting"

From his brief sketch, Navin has seemingly worked out a smooth continuity that should work up in to a well rounded out photoplay

The Honor Is Yours!

No greater honor can be achieved by the Amateur motion picture maker than to be awarded one of the medallions which will be given by the American Society of Cinematographers in the 1933 Competition being conducted by this paper

In the judging of these pictures this Society of expert cinematographers recognizes the limitations of the 16 mm camera the difficulties you must encounter without having all of the professional equipment at your command Therefore, a recognition, an award, is an acknowledgment that your work is outstanding – that you have achieved great progress in the making of motion pictures

The classifications are wide enough and varied enough to permit everyone with worthy work recognition Last year awards were given for Photography, Kodacolor, Home Movie Production, Scenic, Animated Cartoon, News Reel, Nature Study, Medical, Technical Process, Educational, Travel and Aerial Photography

It is not necessary that you be a subscriber of this paper The only rule is that you have no professional help, and that the pictures be received at the offices of the AMERICAN CINEMATOGRAPHER not later than Oct 31, 1933.

Each entrant, whether he wins a prize or not, will be given an expert criticism of his picture by a member of the American Society of Cinematographers

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Hunting With a Camera

Continued from Page 59

First of all, comes the outfit You'll need a good camera, of course; one that is light and portable, one that you've had long enough to be perfectly familiar with, one that you can get into action quickly and accurately—for nature in the raw doesn't wait for any cameraman! Now, if you are hunting out west, you'll probably be in the saddle; so you'd better make provision for slinging your camera around your neck Forget about the case—you'll often have to get into action in a matter of split-seconds, and by the time you get the camera out of the case and ready to go Mr Cougar is in the next county

Using Field Glasses

In most cases, you'll need a pair of field-glasses, so you can spot your game at a distance, for the same reason, you'll need a couple of telephoto lenses in a turret Personally, I use an f.1 8 one inch lens, an f.3 5 two-inch lens, and an f 4 5 four-inch lens That assortment was John Arnold's advice—and a mighty good choice, I found You can get more powerful telephotos—but you'll need a tripod for them; besides, they won't have much depth of focus—and when you're in a hurry you can't always stop to focus perfectly Super-Sensitive film, of course, for light-conditions won't always be perfect, by a long shot—and the extra speed of Super will save many a shot that you'd have to pass up otherwise So will that fast one-inch lens! Incidentally, it's a good bet to practice enough beforehand so that you can hit the exposure pretty close to right every time, without having to consult a meter Also, a camera that has a variety of speeds is mighty useful; in bad lights, you can get away with, say, 12 picture-speed without speeding the action much—and the extra exposure helps a lot On the other hand, when the light is good, slow-motion pictures (taken at 32 or 64) are fascinating I've never seen anything to equal the grace of a Cougar's movement when he's in a hurry I've seen some of them jump out of a thirty or forty foot tree, and land running Done in slow-motion such action is really wonderful

Brace Your Camera

Some sort of a brace that you can rest the camera on is a big help in using telephoto lenses, you can't always use a tripod—but a firm foundation makes all the difference in the world—especially when you're using a four-inch lens Another thing in this type of work use an auxiliary finder of some sort—one that gives a really good-sized image, for the regular finders, when matted down for telephoto lenses, are so darn small that if you do manage to follow your object it's more luck than anything else

If you can manage to get some more or less close shots of the animal, by all means do it It peps up your finished reel a whole lot.

No, there's nothing like hunting with a movie-camera Next vacation I get I'm going up into the Rockies—and try and bag some grizzlies Then I may really have something to talk about!

Light Control

Continued from Page 62

on a person is too harsh, and yet you do not wish to diffuse the entire scene, you will have to resort to a gauze diffuser Cover a rather large barrel hoop with a layer or two of white gauze, depending on the intensity of the sun and the amount of diffusion desired, and fasten this hoop to the end of a long pole so that it can be easily handled at a distance To use, it is simply held between the source of the light and the person being photographed In this way only the light falling on the person is diffused while the rest of the scene is illuminated with just as much hard light as before

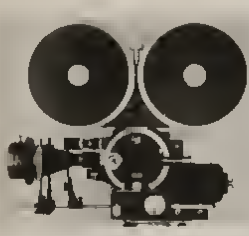
If you do not wish to use gauze in diffusing a scene you can secure diffusion filters which are equally efficient They may be obtained in several different degrees of diffusion The most popual one is the Schiebe 1½, which is mostly used for close-ups as it eliminates most of the harsh lines on the face A 75x increase in the exposure is required with all types of emulsions

Then again the neutral density filters perform a similar function They are used to modify extreme harshness and to soften strong contrasts such as sunsets, back-light on water, strong sunlight on white expanses such as sandy beaches and the like These filters come in four degrees, ranging from the 25% with a factor of 2 for all types of emulsions to the 100% with a factor of 8 for all types of emulsions

The old reliable K-3 and G filters have other uses in addition to their color correction and haze cutting properties In flat daylight they will increase the contrast to a considerable degree In place of the no longer obtainable K-3 filter, the X1 and X2 filters will perform a similar function Their factors, as always, depends on the type of emulsion they are being used with

In addition to all the aforementioned devices and dodges there is one other factor which is quite necessary And that is common sense In fact, it should be used at all times in cine work, it will always improve the film

16MM 35MM



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Shooting Indian Sun Dance

Continued from Page 60

paid them three hundred dollars for permission to take pictures of their ceremony Since that time a movie camera means big money to them.

But the agent tipped me off to some big medicine—and it worked Get to the festivities before the real ceremonies begin Give each dancer a dollar, there are usually about ten dancers, and they will go through their stuff for you, adding a few extra flourishes for your especial benefit Perhaps a fifty cent piece would do the trick this year—who knows?

Studying the Professional

Continued from Page 61

advertised, the unsung portion of the program that will give you the basis of what your type of picture should contain of either scenic or travel The majority of those pictures are shot so that they do not depend upon the sound of the occasion, but are given either a music background later or a descriptive talk Basically they are silent Study those pictures when you in the theatre and then analyze what they contained to make them interesting to you You'll find it's the human and intimate things Those scenes which showed the spirit of the event, whether it is lethargic or of a high tempo Those pictures will inspire you.

Victor Reverse Action Camera

● Effective June 1st, Reverse Action will be included as a regular feature of the Model 5 Victor Camera according to a current announcement by Victor Animatograph Corporation, Davenport, Ia This feature will not be accompanied by an increase in price

It is expected that Reverse Action will be made available to present Victor users also, as it is claimed that the feature can be built into cameras of users willing to pay a reasonable alteration charge

The Victor method of handling this permits the film to be backed up for making lap-dissolves or double exposures without the slightest hazard of losing the film loop or piling the film up as both feed and take-up reel shafts are power-motivated and equipped with friction clutches Film action is reversed by means of a hand crank, which facilitates counting of film frames

Double exposure and dissolves is brought to Victor users by means of this newly developed reverse action This seemingly is the popular trend among present Cinephotographers who are desirous to securing effects that are professional in their aspects

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Special Effect Use of Filters

Continued from Page 51

the light to pass through it that is of the same color as the filter. Example: a pure red filter passes a pure red light while a pure blue passes a blue, and so forth.

(b) A transparent color filter stops or prevents light from passing through it which is of a different color than that of the filter up to its saturation point.

(c). The saturation point of a color filter depends upon the purity of the color, the density of the color, and the intensity of the light that it is filtering.

Interpreting those three sub-divisions of selective filters in terms of exposure and balance on a Pan-chromatic negative.

Color and Exposure

Division (a) means that if we have a red object (for convenience we will use the term colored object, meaning that we have colored light coming from the object, whether it is caused by illuminating white with a colored light or illuminating a colored object with white light), and add a red filter to the camera which is of the same color as the object, there will be substantially no change in the density or exposure of the red object on the film as compared with not using a filter. In other words, a color filter does not change the exposure of an object which is the same color as the filter.

Division (b) means that if we have a red object and add a blue, or green filter (there being only three primary colors) to the camera, there will be a change in the density or exposure of the red object on the film as compared with not using a filter and this amount of change in exposure is dependent upon the saturation point of the filter.

Amount of Color Important

Division (c) would probably become confusing if all the factors were taken into consideration, so we will only consider the most important factor, which is density or amount, of color in both the filter and the object and interchange the expressions, saturation point for density of colors so that the difference in exposure or density on the film in the (b) illustration would be dependent upon the density of the color filter and color of the object, or, combining (b) and (c) in a general statement, a color filter will only change the exposure of an object which is of a different color than that of the filter, and the amount of change in exposure is dependent upon the density of the filter, and amount of color from the object.

As we have formulated rules which apply only to colored objects, and colored filters we should also consider colored filters for non-colored objects, or whites, blacks, grays as I have stated above, the neutral or non-selective filters do not

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have any effect upon colored objects except to change the exposure equally for all, the reverse being also true when the objects have no color and a colored filter is added, the exposure is simply decreased, depending upon the density of the colored filter, or a colored filter is only selective when there is color for it to select from, and this rule, although applying to the use of all filters is of greatest importance in the special effect use of filters, because without colored objects there is no filter which can be added to create an out of balance condition that cannot be done with a change of exposure

Filters can be a complicated tool in the hands of the photographer. Few seemingly know that many filters might serve a double purpose This basic knowledge must be possessed in order to use the filter intelligently The thing to be determined before using the filter is to decide whether it is for special effect or for correction.

This article dwells briefly with the fundamental purposes of filters Their other phases will be gone into in future articles

You Must Keep Emulsions Dry In Tropics

Continued from Page 53

Bell and Howell for either black and white or color We carried several Eyemos Other than that our spare parts consisted of the smaller things mostly

The sound equipment we took with us was never unpacked We intended to get the jungle noises of birds and animals, but decided we could get them just as well back here in Hollywood, at the zoo

We also had with us Steinman developing reels, but built our own tanks there in Ceylon. Built our own drying drums We wanted to keep our equipment down to a minimum for both our trip on the ocean and our travel to the base of operation.

Cemented lenses gave me trouble The moisture seemed to creep between the two elements to penetrate right into that cement and ruin my lenses I stuck to uncemented lenses on that trip and sealed my cemented lenses in water tight containers

Moisture crept right between those pieces of glass as tightly as they are fitted into the mounts, as carefully as they are constructed This to me was a surprise I felt that there must be some limit to where that creeping moisture could go . to the extent it could cause trouble But its action is slow . sure—just like the heat pressing creeping , clinging, never letting you forget you are in the tropics

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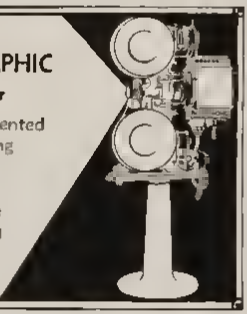

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Riddle Me This

Continued from Page 52

if the subject-matter is properly chosen, more than justify the added effort necessary

HAL MOHR, A.S.C., Cinematographer of 'Broadway,' The King of Jazz," etc

"I do not feel that the existing natural-color processes have as yet attained perfection, either in operation or in results Therefore, I feel that under existing conditions, black-and-white is the more expressive medium as well as the more economical However, I firmly believe in the future of natural-color cinematography It is bound to achieve technical, artistic and operative perfection, probably it will do so sooner than any of us expect When the day comes that we can make perfect natural-color pictures on the same efficient basis of our present perfected black-and-white I shall certainly prefer to work in color, for it offers greater opportunities for creative artistry than black-and-white can begin to approach.

WALT DISNEY, Creator and producer of "Mickey Mouse" and the "Silly Symphonies"

"For some time past, we have been making our 'Silly Symphonies' in Technicolor The results have been most satisfactory Our methods have been unchanged except that in creating our stories we have naturally chosen plots and subject-matter which lent themselves to the fantastic application of color in other words, we have seen to it that the color was an integral part of every script, rather than a mere accessory. As to the box-office reaction to color, I can say little, for that is more intimately the concern of the distributor than of the producer I can, however, repeat, that we feel well satisfied, and entirely justified in making our release in Technicolor"

We Wore Silk Gloves In Alaska

Continued from Page 54

when it became frozen and too cold we used airplanes These small boxes were mighty convenient in the loading of a plane

Because of the contraction and expansion of the elements in the tubes we quickly discovered we had to tune the light valve in the temperature in which they were to be used

Electrolitic condensors and other vital parts we wrapped in fawn skin

While it was the expectation that the sound we would receive would not be up to par and we were told sound would suffer because of the cold, we have found in tests that it was not noticeably affected

We kept the cold out so we could get the sound in.

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Trainer-Parsons Optical Co, 228 Post Street
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Dean Becomes Dealer

● Some time during June, Faxon Dean, well known cameraman, will launch a photographic supply business in Hollywood on Cahuenga between Hollywood Blvd and Selma Ave, under the firm name of Camera Supply Co.

Dupont's Infra "D" Pierces Mist

● Finding that the regular supersensitive and panchromatic film would not give a night effect over the clouds that would be satisfactory the camera department of Metro Goldwyn Mayer turned to the Dupont Infra "D" film which is highly sensitive to the Infra Red Rays

Elmer Dyer, A S C was assigned to secure these shots Using this film together with such filters as the 88 he not only turned the sky black and secured the desired effect, but the white clouds stood out very prominently with the film reaching beyond the haze and picking up additional clouds that were not visible to the eye

"At an altitude of 10,000 feet" said Dyer "I picked up scenes from 55 to 60 miles away Things that were hidden to me beyond the haze From above Lake Elsinore the camera registered San Pedro and other surrounding country

' One interesting observation in the use of this film was that it turned the green leaves on the trees white Seemingly they reflect a great deal of the red to secure this effect "

Multicolor Reopens As Laboratory

● The Multicolor plant of Hollywood which has been under the guidance of a receiver for many months has been taken over as a private venture by Robert Fulwider to be operated as a laboratory for black and white prints as well as color works.

Phil Van Dusen who has long been associated with laboratory as camera work and who efficiently conducted this plant in the past has been put in charge of the laboratory under the new organization

Fleischer Invents Animating Device

● An 'Approach camera' has been invented by Max Fleischer, cartoon producer This is used in making cartoon closups It is claimed this device allows photographing of drawings with camera as near as one inch, as compared with the 14 inch distance ordinarily required The outfit is said to include a swingback objective bed

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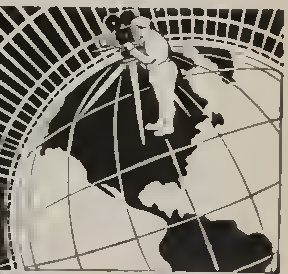

Experimenting With Carbon Lights for Color

● The National Carbon Company has been experimenting with carbon to quiet them to such a point that they will be useable under present studio conditions

They have been encouraged in this work it is understood by the Technicolor company who find carbon more ideal for their three color work because of the great amount of blue the carbon light gives off.

Mole-Richardson is in the last stages of constructing a lamp house for these carbons It is expected that these lamps will be ready for their final test within the next month

Modern Photography Annual

● Our eye has had its annual feast Modern Photography, Studio Annual edited by C G Holme has just come to our desk

To say it's a delight in composition in beautiful photographic effects, in lighting would be slighting this fine work It is a splendid education in the trend and advancement of modern photography

Contributors from all corners of the world are included in its covers, but, possibly a bit surprising was the great number of prints from newspaper photographers whose credo is "get the picture" often compelling them to sacrifice quality

Modern Photography is published by the Studio Publications, Inc, 381 Fourth Ave, New York City.

MGM Installs Bell & Howell Automatic Printers

● Following a series of exhaustive tests, the Metro-Goldwyn-Mayer studios has installed a battery of recently developed Bell & Howell automatic sound and picture film printers

Consolidated to Continue Independent Financing

● Consolidated Film Industries, Inc, which has been more or less the backbone of many of the independent producers in Hollywood strongly deny the contention that they will no longer back the independent ventures

A statement emanating from R I Poucher, vice-president of that company states in part "Our policy to finance independent production for reliable independent producers continues in the future as in the past and independent producers can have our assistance at any time they need it"

With their main business laboratory work the Consolidated organization has been instrumental in the backing of a great number of independent pictures where the principals have been able to show a certain amount of capital and at least a reasonable production that indicated box-office possibilities.

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AKELEY CAMERA—Practically new rebuilt for color 40mm and 50mm lenses, 10 magazines cases tripod etc Cost $5 000 —will sell for $1250 Box R W S care American Cinematographer

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FOR SALE—Special complete 16 mm editor with geared rewinds magnifier and splicer $4 50 plus postage Money refunded if not satisfactory FOTOSHOP, 136 West 32nd St New York City

544 pages of valuable information ●

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SHOTGUNS Target Pistols, Rifles and other good firearms may be traded in at liberal allowances on any photographic equipment, movie or still, including Bell & Howell Eyemos and Filmos Eastman, Victor, Leitz, Zeiss, Stewart Warner and other leading makes NATIONAL CAMERA EXCHANGE, 5 South 5th St, Minneapolis, Minn

WANTED—Sept Camera must be reasonable Address Box V150 American Cinematographer 6331 Hollywood Blvd Hollywood Calif

WANTED—DeVry 35mm Hand-camera, double claw movement Must be cheap and in good condition Box G care American Cinematographer

WANTED—Motor adapter J R Lockwood Glendale Douglas 3361-W

WANTED—Mitchell High Speed Silent Camera box only without equipment Must be cheap for cash Box 140 American Cinematographer

SALES AGENTS or representatives for exclusive state distribution for Apex Professional Film for the Amateur Apex Films Inc 723 Seventh Ave, New York

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